UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,618	07/19/2006	Peter Bleckert	4147-178	8206

23117   7590   12/23/2009
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EXAMINER
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ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
12/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/586,618	BLECKERT ET AL.
	Examiner	Art Unit	
	MICHAEL T. THIER	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>16 October 2009</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>34-66</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>34-36,38-41,43-51,53-56 and 58-66</u> is/are rejected.

7) ☒ Claim(s) <u>37,42,52 and 57</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>19 July 2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/16/09,10/16/09</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statement (IDS) submitted on 7/16/2009,

and10/16/2009 has been entered and considered by the examiner.

Response to Arguments

2.   Applicant's arguments have been fully considered but are moot in view of the

new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 34, 36, 38-40, 44-49, 51, 53-55, and 59-66 are rejected under 35 U.S.C.

103(a) as being unpatentable over Allison et al. (US 2002/0159387) in view of Fujino

(US 2003/0174689).

Regarding claims 34, 49, and 65. Allison teaches a method of handling

messages in a mobile communications system (title and abstract), comprising the steps

of:

transferring a message (par. 10, i.e. SMS) and associated first hardware

identification data of an intended terminating receiver of the message (par. 10, i.e. MSISDN of receiving mobile reads on hardware identification data) from an application node (par. 10, i.e. MSC) to a message controller (par. 10, i.e. SMSC, the MSC transmits the SMS message and the MSISDN of the receiving mobile to the SMSC, thus reading on the limitation as claimed);

interacting between the message controller and a location updated subscriber database (par. 10, i.e. the SMSC sends a message to the HLR, i.e. the location updated subscriber database, using the receiving mobiles MSISDN that the SMSC received from the MSC);

further managing of the message based on the first hardware identification data and data stored in the location updated subscriber database (par. 10, i.e. the HLR responds with the IMSI of the recipient and the MSC with which it is currently registered (based on the MSISDN of the recipient provided to the HLR), and if the information indicates the mobile is registered with an MSC, the SMSC can deliver the short message. Therefore, the further managing clearly takes place based on the MSISDN and data stored in the HLR (i.e. the IMSI and current MSC)).

However, Allison does not specifically disclose that the transferred message includes a first hardware identification data that *uniquely identifies an intended terminating receiver*. The examiner would like to note that Allison teaches transferring the message with an MSISDN number. However, as argued by the applicant, the definition of MSISDN can be mobile *subscriber* ISDN, and thus would not uniquely identify the terminating receiver (i.e. the hardware). The examiner would like to note that

since Allison does not specifically disclose that the MSISDN is a mobile _station_ ISDN

(which would uniquely identify the receiver), the following reference is provided.

Fujino teaches a method and system for reducing the burden on a network

system (par. 17). He teaches in par. 11 that the MSISDN can be a mobile station ISDN

number, and thus would be understood to uniquely identify the hardware (i.e.

terminating receiver). Therefore, the examiners interpretation of the MSISDN reading on

a first hardware identification that uniquely identifies the terminating receiver as in

Allison can clearly be understood when utilizing the idea that the MSISDN is defined as

a mobile station ISDN number as in Fujino. For arguments sake, the examiner would

further like to note that Fujino also teaches in par. 41-42 and figure 3 steps s13 and s21

the idea of transferring a message including the IMSI of the destination mobile (i.e.

hardware identification that uniquely identifies the terminating receiver.) Therefore,

when using the IMSI in place of the MSISDN, the terminating receiver is clearly

identified in the transferred message. (as apposed the subscriber being identified, as

argued by the applicant)

Therefore it would have been obvious for one of ordinary skill in the art at the

time of invention to utilize the teachings as in Fujino with the teachings as in Allison.

The motivation for doing so would have been to allow for reducing traffic congestion at

higher order nodes or reducing cost for communication. (Fujino par. 20)

Regarding claims 36 and 51. Allison further teaches wherein the step of

interacting in turn comprises the steps of:

sending the first hardware identification data from the message controller to the

location updated subscriber database (par. 10, i.e. the SMSC sends the short message

to the HLR and the HLR uses the recipients MSISDN (i.e. hardware identification data),

which is provided to it by the SMSC as well);

whereby the first hardware identification data is used in the location updated

subscriber database to retrieve an address, if any, of a switching or support node

presently handling hardware defined by the hardware identification data (par. 10, i.e. the

HLR responds with the IMSI of the recipient and the MSC with which the recipient

mobile is currently registered, thus the address of the MSC is retrieved by the HLR from

its database); and

returning the address of the switching or support node, if any, from the location

updated subscriber database to the message controller (par. 10, i.e. the HLR responds

with the IMSI of the recipient and the MSC with which the recipient mobile is currently

registered.);

whereby the step of further managing comprises initiating of a transmission of the

message to the address of the switching or support node. (par. 10, i.e. the SMSC then

transmits a message to the MSC)

Regarding claims 38 and 53. Allison further teaches transferring mobile

subscriber identification data associated with the message from the application node to

the message controller. (par. 10, i.e. MSISDN can also read on mobile subscriber

identification data)

Regarding claims 39 and 54. Allison further teaches wherein the mobile

subscriber identification data is a mobile subscriber ISDN number. (par. 10, i.e.

MSISDN)

     Regarding claims 40 and 55. Allison further teaches wherein the step of interacting in turn comprises the steps of:

     sending the mobile subscriber identification data from the message controller to the location updated subscriber database (par. 10, i.e. the SMSC sends the short message to the HLR and the HLR uses the recipients MSISDN (i.e. which also reads on subscriber identification data), which is provided to it by the SMSC as well);

     retrieving an address, if any, of a switching or support node presently handling a mobile subscriber defined by the mobile subscriber identification data and second hardware identification data uniquely identifying hardware equipment that, according to the location update subscriber database, is associated with the mobile subscriber (par. 10, i.e. the HLR responds with the IMSI of the recipient (i.e. second hardware identification, that uniquely identifies hardware equipment) and the MSC with which the recipient mobile is currently registered, thus the address of the MSC and the IMSI of the mobile is retrieved by the HLR from its database based on the MSISDN); and

     returning the address of the switching or support node and the second hardware identification data from the location updated subscriber database to the message controller. (par. 10, i.e. the HLR responds with the MSC with which the recipient mobile is currently registered and the IMSI of the mobile.)

     Regarding claims 44 and 59. Allison further teaches wherein the first and second hardware identification data comprises at least one of subscriber identification module identification data and mobile equipment identification data. (par. 10, i.e. the

IMSI reads on subscriber identification module identification data and mobile equipment identification data or MSISDN reads on mobile equipment identification data)

Regarding claims 45 and 60. Allison further teaches returning at least one of subscriber identification module identification data and mobile equipment identification data from the location updated subscriber database to the message controller. (par. 10, HLR sends the IMSI of the recipient mobile to the MSC)

Regarding claims 46 and 61. Allison further teaches wherein the message is a short message service--SMS--message (par. 4 and 10) and the message controller is a SMS controller (par. 10, i.e. SMSC).

Regarding claim 47. Allison further teaches wherein the location updated subscriber database is home location register (par. 10, i.e. HLR).

Regarding claim 48. Allison further teaches wherein the switching or support node is a mobile switching centre. (par. 10, i.e. MSC)

Regarding claims 62 and 66. Allison teaches a communications system node having location updated subscriber database (title, abstract, par. 10, i.e. MSC node and HLR), comprising:

storage for address and hardware identification data associated with mobile subscribers (par. 5-6 i.e. HLR is a database to store information about subscribers, such as IMSI, MIN, MDN, and MSISDN, further see par. 10);

means for updating content of the storage (par. 5, see where it is explained the HLR has identifications of the MSC with which the subscriber is "currently" associated, thus the content can be updated to allow for knowing the current MSC the mobile is

located in, rather than an old MSC);

receiver for hardware identification data associated with an intended terminating receiver of a message from a message controller (par. 10, i.e. the SMSC sends the short message to the HLR and the HLR uses the recipients MSISDN (i.e. hardware identification data), which is provided to it by the SMSC as well);

means for retrieving an address, if any, of a switching or support node presently handling hardware defined by the hardware identification data from the storage (par. 10, i.e. the HLR responds with the IMSI of the recipient and the MSC with which the recipient mobile is currently registered, thus the address of the MSC is retrieved by the HLR from its database); and

sender for sending the address of the switching or support node presently handling hardware defined by the hardware identification data to the message controller. (par. 10, i.e. the HLR responds with the IMSI of the recipient and the MSC with which the recipient mobile is currently registered.)

However, Allison does not specifically disclose that the transferred message includes a first hardware identification data that *uniquely identifies an intended terminating receiver*. The examiner would like to note that Allison teaches transferring the message with an MSISDN number. However, as argued by the applicant, the definition of MSISDN can be mobile *subscriber* ISDN, and thus would not identify the terminating receiver (i.e. the hardware). The examiner would like to note that since Allison does not specifically disclose that the MSISDN is a mobile *station* ISDN (which would clearly uniquely identify the receiver), the following reference is provided.

Fujino teaches a method and system for reducing the burden on a network

system (par. 17). He teaches in par. 11 that the MSISDN can be a mobile station ISDN

number, and thus would be understood to uniquely identify the hardware (i.e.

terminating receiver). Therefore, the examiners interpretation of the MSISDN reading on

a first hardware identification that uniquely identifies the terminating receiver as in

Allison can clearly be understood when utilizing the idea that the MSISDN is defined as

a mobile station ISDN number as in Fujino. For arguments sake, the examiner would

further like to note that Fujino also teaches in par. 41-42 and figure 3 steps s13 and s21

the idea of transferring a message including the IMSI of the destination mobile (i.e.

hardware identification that uniquely identifies the terminating receiver.) Therefore,

when using the IMSI in place of the MSISDN, the terminating receiver is clearly

identified in the transferred message. (as apposed the subscriber being identified, as

argued by the applicant)

Therefore it would have been obvious for one of ordinary skill in the art at the

time of invention to utilize the teachings as in Fujino with the teachings as in Allison.

The motivation for doing so would have been to allow for reducing traffic congestion at

higher order nodes or reducing cost for communication. (Fujino par. 20)

Regarding claim 63. Allison further teaches wherein the sender further

comprises means for sending hardware identification data to the message controller

(par. 10, i.e. the MSC transmits the SMS message and the MSISDN of the receiving

mobile to the SMSC).

Regarding claim 64. Allison further teaches wherein the location updated subscriber database is a home location register. (par. 5 and 10, i.e. HLR is a database)

5.   Claims 35, 41, 50, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison et al. (US 2002/0159387) in view of Fujino (US 2003/0174689) and further in view of Mizell et al. (US 2003/0126435).

Regarding claims 35 and 50. Allison and Fujino teach the limitations of the previous claims. Allison further teaches using the provided MSISDN to search the HLR for a corresponding IMSI and MSC which reads on a comparison that the further managing is based upon (i.e. since the message will be sent to the user if the information indicates the recipient is currently registered with the HLR, par. 10).

However, they do not specifically disclose the idea of comparing the first hardware identification data and hardware identification data stored in the location updated subscriber database.

Mizell teaches a method, device, and node for authentication an originator of a data transfer (title and abstract). He teaches in par. 26 that the IMSI of the mobile (hardware identification data) can be compared with the IMSI stored in the HLR.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings as in Mizell, with the teachings as in the combination of Fujino and Allison. The motivation for doing so would have been to allow for authenticating the mobile terminal (par. 26).

Regarding claims 41 and 56. The combination further teaches wherein a comparing step being performed in the message controller, comparing the first and

second hardware identification data (Mizell par. 26, as explained in the rejection of

claims 35 and 50 above); and wherein the step of further managing comprises, if the

first and second hardware identification data are equivalent, an initiating of a

transmission of the message to the address of the switching or support node (Allison

teaches initiating a transmission of the message to the address of the switching or

support node based on a comparison in par. 10 where he explains if the information

indicates the mobile is currently registered (i.e. using the provided MSISDN to compare

to data stored in the HLR to find the IMSI) with the HLR the SMSC transmits a short

message to the MSC). The motivation for doing so would have been to allow for

authenticating the mobile terminal (Mizell, par. 26).

6.   Claims 43 and 58 rejected under 35 U.S.C. 103(a) as being unpatentable over

Allison in view of Fujino and further in view of Mizell as applied to claims 41 and 56

above, and further in view of Brune et al. (US 6993320).

        Regarding claims 43 and 58. Allison, Fujino, and Mizell teach the limitations of

the previous claims.

        However, they do not specifically disclose wherein the step of further managing

further comprises, if the first and second hardware identification data are non-

equivalent, sending of an error message to the application node.

        Brune teaches a method and apparatus for accessing telecommunications

services (title and abstract). He teaches the idea of comparing a first hardware

identification data with a second hardware identification data and if they do not match,

sending an error message back to an application node in column 6 lines 22-32. He

explains that the HLR will check the provided IMSI to see if it is registered, and if not,

sends an error report back to the VLR. The idea of checking to see if the IMSI is

registered reads on seeing if two identification data are equivalent since the HLR will

check the provided IMSI against all of its registered IMSI (and thus a second

identification data) and if there is no matching IMSI (i.e. the provided IMSI is not

registered), the error message is sent.

Therefore it would have been obvious for one of ordinary skill in the art at the

time of invention to utilize the teachings as in Brune with the teachings as in the

combination of Allison, Fujino, and Mizell. The motivation for doing so would have been

to allow for proper authentication to obtain access to a mobile network. (Brune column 5

lines 49-60)

Allowable Subject Matter

7.   Claims 37, 42, 52, and 57 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MICHAEL T. THIER whose telephone number is

(571)272-2832. The examiner can normally be reached on Monday thru Friday 7:30-

4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick N. Edouard/   /MICHAEL T THIER/
Supervisory Patent Examiner, Art Unit 2617   Examiner, Art Unit 2617
                                                        12/16/2009